



# Project Report: Achieving Value for Money Surrey Outpatient Hospital



June 2009

## Purpose of this Document

Before entering into a public private partnership, Partnerships BC works with its clients to undertake an analysis of the value for money expected over the life of the partnership. Value for money is a broad term that captures both quantitative factors, such as costs, and qualitative factors, such as service quality and protection of public interests.

Value for money is one of six key principles guiding public sector capital asset management in British Columbia. The others are:

1. Sound fiscal and risk management;
2. Strong accountability in a flexible and streamlined process;
3. Emphasis on service delivery;
4. Serving the public interest; and
5. Competition and transparency.

Since 2002, these principles have guided the British Columbia (B.C.) public sector's approach to acquiring and managing assets such as bridges, roads and health care facilities. Ministries and other public bodies, such as health authorities, are encouraged to consider all available options for meeting their service objectives. Under the Province's Capital Asset Management Framework, options are analyzed and, after considering the qualitative and quantitative advantages and disadvantages of each, the one that overall best meets service delivery needs and makes the best use of taxpayers' dollars is chosen.

In some cases, the best option may be traditional procurement – where assets are purchased entirely with taxpayer supported finance and operated exclusively by the public sector. In other cases, agencies may find innovative ways to meet their service needs without acquiring capital assets. In all cases, agencies are publicly accountable through regular budgeting, auditing and reporting processes.

In all of its procurement processes, including public private partnership agreements, the Province is committed to a high standard of public disclosure to ensure accountability. This report describes the rationale, objectives and processes that led to the use of a public private partnership, and the need for the Surrey Outpatient Hospital project, giving the public a clear sense of how and why the decision was reached to proceed with that option. It explains how value for money was measured and how it is expected to be achieved in the context of current market conditions. It compares key aspects of the final agreement to other options considered for the project. It also describes the benefits of the project as a whole.

For more on the Capital Asset Management Framework, go to [www.fin.gov.bc.ca/tbs/camf.htm](http://www.fin.gov.bc.ca/tbs/camf.htm)

For more on public private partnerships in B.C., go to [www.partnershipsbc.ca](http://www.partnershipsbc.ca)

This report was developed jointly by Fraser Health and Partnerships BC and is based on Partnerships BC methodology (for the calculation of value for money). Partnerships BC in conjunction with Fraser Health, is responsible for the contents of this report, including the reasonableness of facts, assumptions and professional opinions that have been presented.

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## 1. Executive Summary and Highlights

In October 2005, Fraser Health developed a wide-ranging plan intended to meet the health care needs of Surrey and the surrounding communities – the fastest growing population in British Columbia (B.C.). The creation of a new outpatient hospital was a key element of the strategic plan, helping to relieve some of the congestion currently experienced at Surrey Memorial Hospital (SMH). The new Surrey Outpatient Hospital (SOH) will be located in Green Timbers Urban Forest<sup>1</sup>, less than one kilometre from SMH, and will provide a range of outpatient services including day surgery, diagnostics and imaging (including MRI, CT, ultrasound and mammography), chronic disease, surgical and peri-natal outpatient clinics and other Fraser Health Regional Programs.

In developing plans for the SOH, Fraser Health undertook extensive research to ensure that the new facility will improve the way outpatient services are delivered, with a focus on patient-centred care that embraces the latest care delivery and technology trends and is flexible enough to allow for change in the future. Guiding principles include the efficient use of resources, integrated care delivery and knowledge transfer and high environmental standards in the design and operation of the facility. Construction of the SOH is expected to be completed by April 2011.

The SOH project will be delivered using the public private partnership (PPP) delivery model. There are additional project elements required to support the SOH that will be managed outside of the partnership delivery model. For example, the private partner will be responsible for procuring medical equipment, based on the recommendation of Fraser Health, but medical equipment will be financed outside of the partnership agreement.

The total project cost is \$239.1 million<sup>2</sup>, the capital cost components being delivered through the PPP is fixed at \$172.4 million, and the amount being financed outside of the PPP (notably medical equipment and IT equipment) is \$66.7 million.

### Procurement Decision

A thorough analysis of a variety of procurement options, including both traditional and partnership delivery models, showed project objectives and patient needs can best be met by procuring the project using a Design Build Finance Maintain (DBFM) approach. Under this procurement model, the successful proponent designs, builds, finances and maintains the facility.

### Rigorous and Fair Selection Process

A two-stage procurement process was employed to select the winning proponent for this project. This included a request for qualifications (RFQ) and a request for proposals (RFP) stage. Five teams responded to the RFQ and a short-list of three teams, representing a range of B.C., Canadian and international experience in design, construction, facilities management services and financing, were selected to participate in the RFP stage of the competition.

Following a rigorous assessment process, BC Healthcare Solutions, a consortium with an established record in delivering projects of this nature, was selected as the preferred proponent.

A Fairness Advisor was engaged to monitor the competitive selection process and concluded that the process was fair, open and transparent. Reports of the Fairness Advisor are available at:

<http://www.partnershipsbc.ca/files/project-fha.html>

### Partnership Agreement Highlights

Under the PPP agreement, BC Healthcare Solutions will build a four-storey, 17,500 square-metre outpatient hospital that includes retail space (for food services and a commercial pharmacy) and parking. BC Healthcare Solutions will be responsible for completing and commissioning the new SOH by April 2011.

<sup>1</sup> Located in Surrey at 140th and Fraser Hwy.

<sup>2</sup> The total project capital cost increased from when the project was first announced in 2007. The factors that led to this increase are described in Appendix 1.

The capital cost for the SOH elements being delivered under the PPP agreement is \$172.4 million, with financing being arranged by BC Healthcare Solutions. Once construction of the outpatient hospital is complete, BC Healthcare Solutions will receive an annual service payment (ASP) and payments will continue for 30 years. The ASP is comprised of three components:

- Repayment to BC Healthcare Solutions for the design, construction and financing of the Surrey Outpatient Hospital (facility capital);
- Funding for replacement and refurbishment of building elements (facility lifecycle); and
- Payment for facilities management services such as physical plant maintenance and grounds maintenance (facility management services).

Actual payments will be made monthly and will be contingent upon service performance, facility availability and service quality. Deductions will be made for non-availability of the facility or failure to achieve defined service quality levels. For the first year of operations, the ASP payment is \$17 million (Fiscal Year 2011/2012) assuming no deductions.

BC Healthcare Solutions will provide a range of non-clinical facilities management services (e.g. plant maintenance). Fraser Health will continue to be responsible for providing all clinical services, food services, portering, security and other miscellaneous services.

Fraser Health will own the site and the facility.

## Project Benefits and Innovations

The SOH will provide residents of Surrey and surrounding communities with improved access to outpatient services in a state-of-the-art health care facility. The new outpatient hospital incorporates high-quality, culturally-sensitive, elder-friendly designs and best practices in global health care.

The new patient-centred facility will relocate a number of services from SMH and will offer new and enhanced outpatient services. Highlights of the patient-focused SOH include:

- A new 17,500 square-metre, four-storey facility located less than one kilometre away from SMH;
- Expanded day surgery and diagnostic services, including six operating rooms and ten procedure rooms;
- Extensive space for ambulatory care clinics including primary care;
- State-of-the-art medical equipment;
- Improved service to outpatients;
- Consolidation and location of services to benefit patients; and
- Underground and surface parking spots.

Highlighted design features and innovations include:

- A non-institutional feel, moving away from the traditional hospital to a more patient-centred, modern, express service concept;
- Efficient patient flows through the facility, with intuitive way-finding to help patients access their health services;
- Patient amenities including convenient access and parking, the opportunity for electronic patient registration, as well as pharmacy and retail outlets and access to attractive outdoor space;
- Flexibility for the future, including modular/moveable walls, wireless Information Technology (IT) capability, and mechanical capacity to allow for facility expansion;
- An innovative approach to pipes and ducts (located on the exterior of the building to provide internal space flexibility); and
- An environmentally friendly, energy efficient building designed to achieve Leadership in Energy and Environmental Design (LEED) Gold certification.

## Risk allocation

One of the key advantages of a PPP is the allocation of risk to the party best able to manage it. For example, the public sector is better able to determine whether the design of a hospital meets a health authority's clinical functionality needs, and so retains that risk. Similarly, the private partner is better able to ensure the design will be cost-effective from an operational and maintenance perspective over the facility's lifecycle, and so accepts that risk.

## Achieving Value for Money

Value for money is a broad term that captures both quantitative factors, such as costs, and qualitative factors, such as service quality. Partnerships BC looks at a broad range of factors in determining whether a project offers value for money to taxpayers, including comparison of the final agreement to other benchmarks – in this case, the expected results of a hypothetical traditional delivery model (public sector comparator), and the expected results of the actual partnership delivery model.

Working with Fraser Health, Partnerships BC analyzed the net present cost of the project and compared it to the estimated net present cost of the risk-adjusted public sector comparator. Partnerships BC determined that the hypothetical net present cost of the project procured using a traditional delivery method is an estimated \$256.7 million. The final agreement with BC Healthcare Solutions has a net present cost of \$234.2 million. ***In financial terms, the final agreement is expected to achieve value for taxpayers' dollars of \$22.5 million.***



*Surrey Outpatient Hospital*

## 2. Project Background, Rationale and Objectives

### Project Background and Rationale

Fraser Health is one of the largest health authorities in Canada, providing a full continuum of health care services to nearly 1.5 million people (one third of the provincial population) in communities within a geographic area that stretches from Burnaby in the Lower Mainland, to Boston Bar in the Fraser Valley. Projections for population growth in Fraser Health are significant. Fraser Health's population is expected to increase by 7 per cent<sup>3</sup> to reach 1.89 million residents by 2020, which will account for 40 per cent of the total B.C. population. By 2031, the population will have increased to 2.17 million people.

Within this region, Fraser South (Surrey, Delta, Langley and White Rock) is the fastest growing area and is expected to account for approximately 45 per cent of the Fraser Health population growth by 2020, adding approximately 180,000 people. In particular, the Surrey Local Health Area (LHA) will contribute nearly 28 per cent of the total Fraser Health growth (around 111,000 people).

In 2005, recognizing the considerable challenges facing the Surrey LHA, Fraser Health developed a plan for relieving the increasing congestion at SMH and for effectively meeting Surrey's health care needs in the foreseeable future. In response, Fraser Health launched the Surrey Health Services Capacity Initiative. The recommendations from the initiative were set out in the "Building for the Future" report, presented to government in October 2005. The creation of a new outpatient hospital was a key recommendation in the report.

The SOH will be located in Green Timbers Urban Forest, less than one kilometre away from SMH. The facility will provide a full range of scheduled outpatient services, including day surgery, diagnostic imaging, medical clinics and other Fraser Health Regional Programs. Clinics for patients with chronic diseases such as congestive heart failure, asthma, diabetes and other debilitating illnesses will also be co-located with the new outpatient hospital.

Approximately 450,000 visits to the new outpatient hospital are expected by 2011, rising to 600,000 by 2020. The facility is expected to play a valuable role in addressing congestion issues at SMH, and by providing significant new health care capacity for the future for the residents of Surrey.

The SOH project will be delivered using the Design Build Finance Maintain (DBFM) partnership delivery model, financed through contributions from Fraser Health and the Ministry of Health Services.

### Project Objectives

The SOH project provides the opportunity to build a state-of-the-art outpatient hospital that will incorporate the latest innovations in health care facility management. Fraser Health has identified six core principles that have guided planning for the facility to-date, with a view to establishing effective care delivery models, clinical support and design at the new facility. These principles will continue to be at the forefront of thinking as the facility is built, and as plans are made for Fraser Health to provide clinical services.

The core principles are:

1. **Patient-Centred:** The facility should facilitate the delivery of patient-centred care that seeks to optimize the overall experience of patients and their families;
2. **Forward-thinking (Future-oriented):** The facility should be designed to accommodate future care delivery trends, technologies and service needs;
3. **Efficient Use of Resources:** The facility should be designed to maximize the value of each health care dollar spent in design and construction and after service commencement;
4. **Integrated Care Delivery and Knowledge Transfer:** The facility should facilitate the involvement of all appropriate care providers in the diagnosis and treatment of patients and facilitate access by care providers to complete and timely health information;

<sup>3</sup> Source PEOPLE 31, 2006.

**5. Optimized Health Outcomes (Better Health):**

The design of the facility should promote health lifestyles and optimize health outcomes for patients; and

**6. Strives for Excellence (Best in Health Care):**

The facility should facilitate excellence in clinical and support services and a healthy workplace environment.

- Consolidation and location of services focusing on the patient experience to create opportunities for more efficient use of resources;
- A facility atrium which includes provision for retail space for a commercial pharmacy, food and retail services, education and meeting space and information areas; and
- More than 600 parking spaces, including both underground and surface parking.

**The Project Scope**

The full scope of the project includes a new 17,500 square-metre outpatient hospital that will be designed to achieve LEED Gold certification.

Facility services and amenities will include:

- Expanded day surgery and diagnostic imaging and laboratory services, including six operating rooms and ten procedure rooms;
- New state-of-the-art medical equipment that includes one MRI scanner, two CT scanners, a shelled-in space for a future second MRI, and other diagnostic and treatment equipment including radiology, bone density, ultrasound, mammography, nuclear medicine and cardiac diagnostics machines;
- Extensive space for clinics, including:
  - o Chronic disease such as asthma and diabetes;
  - o Peri-natal;
  - o Surgical clinics;
  - o A breast health program that will provide significantly faster diagnosis for patients; and
  - o A urology clinic for patients dealing with conditions such as kidney stones and prostate health.
- A primary care area that will provide clinics for seniors and for people living with chronic diseases or with HIV/AIDS;
- Improved service to outpatients through convenient access and faster turnaround times. Features include one-stop appointment scheduling, a streamlined admission and discharge process enabling information technology and teams of multi-disciplinary health professionals for patients with complex care needs;

The total project cost is \$239.1 million, the capital cost components being delivered through the PPP is fixed at \$172.4 million, and the amount being financed outside of the PPP (notably medical equipment and IT equipment) is \$66.7 million.

**Public Health Care Delivery**

All medical and clinical services will continue to be provided under the universal, publicly-funded health care system, consistent with the Canada Health Act. Patients will use their Care Card just like in every other public health care facility, and will not pay for health care services that are medically necessary and covered by the Medical Services Plan.

**Procurement Options Analysis**

As part of the procurement planning process, and consistent with the Capital Asset Management Framework, several traditional procurement delivery models, as well as a range of public private partnership procurement delivery models, were considered. These options included:

- Construction Management to a Guaranteed Maximum Price: The public sector engages an architect to refine a concept design. A construction contractor is competitively selected to work with the architect to develop the detailed design, project budget and schedule. The construction contractor then conducts price competitions to secure subcontractors, and to provide the public sector with a guaranteed maximum price;



- Design Build: The public sector provides performance requirements and seeks multiple design and build proposals. A fixed price Project Agreement is entered into and payments are made over the course of construction;
- Design Build Finance with Take-Out Financing at Substantial Completion (DBFT): The public sector competitively selects a design and construction contractor. The contractor is responsible for designing and building the facility and provides third party (non-recourse) financing during construction. At substantial completion, the public sector pays down the financing provided by the private partner;
- Design Build Finance Maintain with Take-Out Financing at Substantial Completion: This model is similar to DBFT, but the partner includes a maintenance provider to address lifecycle and hard maintenance requirements associated with the facility; and
- Design Build Finance Maintain: The public sector owns the project but seeks multiple proposals to engage a partner to design, construct, finance and maintain the facility for a specific period of time.

The procurement options analysis concluded that the Design Build and DBFM models both offered advantages according to a number of criteria. Taking into account all the evidence, the DBFM model was judged to provide the strongest overall value for money to the taxpayer, would best deliver the outpatient hospital on time and on budget, and meet Fraser Health's procurement goals and objectives. In March 2007, the Province approved funding for the project to proceed as a PPP under a DBFM model.

As part of the DBFM process, the owner provides performance (output) specifications and invites competitive proposals to design, build, finance and maintain the asset. An annual service payment is paid on a regular basis to the private partner, subject to the availability and performance of the asset. ASPs begin only after the asset has been

constructed, meets all specifications, and is available for use, thus providing a strong incentive for the private partner to finish on schedule.

Under a DBFM, the private partner is responsible for:

- Designing, building and commissioning the facility;
- Arranging the project financing for the partner's portion of the capital cost;
- Providing facilities management services (e.g. housekeeping) and lifecycle maintenance; and
- Meeting defined hand-back requirements at the end of the project term.

### **Partnership Delivery Model**

The partnership delivery model is designed to capture the strengths of both the public and private sectors, recognizing that private companies have always played an integral role in delivering public infrastructure such as bridges, highways and hospitals. Partnership agreements build on that history and clearly delineate areas of responsibility for both sectors over the life of a long-term, performance-based agreement. The partnership delivery model has successfully been used to deliver health care and transportation infrastructure projects in B.C.

A PPP can provide better value for taxpayers' dollars, transfer risk to the private sector and add value through design and private sector innovation for projects with certain attributes. It ensures greater accountability for performance because ongoing payments by the public sector are conditional on the private partner continuously meeting performance standards.

### 3. Competitive Selection Process and Results

#### Objectives

The competitive selection process had the following key objectives:

- Select a qualified, experienced partner to finance, design, build, maintain and operate facilities management services for the SOH project;
- Implement a fair, timely and competitive procurement process; and
- Achieve value for money.

A two-stage procurement process was employed to select the winning proponent for this project. This included an RFQ stage and an RFP stage.

The members of the each short-listed team invited to participate under the RFP process are listed in the table below.

RESPONDENT	LEAD DESIGN	CONSTRUCTION	FINANCING	FACILITIES
BC Healthcare Solutions	Kasian Architecture Interior Design and Planning Ltd.	Joint Venture formed between Bouygues Bâtiment International and BIRD Construction	HSBC Infrastructure Fund Management Ltd., Bouygues Construction, Depfa Bank plc. (Advisor)	<ul style="list-style-type: none"> <li>• Ecovert FM Ltd.</li> <li>• Helios Group</li> </ul>
Infusion Health	Stantec	Vanbots Construction Inc.	<ul style="list-style-type: none"> <li>• Bilfinger Berger BOT</li> <li>• John Laing Infrastructure</li> </ul>	Black and MacDonald
Plenary Group	B+H Architects/ CEI Architects	PCL Constructors Westcoast Inc.	<ul style="list-style-type: none"> <li>• Plenary Group (Canada) Ltd.</li> <li>• Deutsche Bank AG</li> </ul>	Johnson Controls LP

The RFP invited the proponents to submit proposals to design, build, finance and maintain the SOH project. A draft Project Agreement was issued with the RFP; during bilateral/collaborative discussions proponents had the opportunity to identify issues or provisions for amendment. These collaborative discussions covered three broad areas: design and construction, legal/commercial and facilities management.

Below is the outline of the competitive selection process and the timeline of key steps in the process.

PROCUREMENT STAGE	TIMING	OUTCOME
Request for Qualifications (RFQ)	March 21, 2007 to April 19, 2007	The project was marketed locally, provincially and nationally. Submissions from five respondents were evaluated and three short-listed teams were announced May 9, 2007: <ul style="list-style-type: none"> <li>• BC Healthcare Solutions</li> <li>• Infusion Health</li> <li>• Plenary Health</li> </ul>
Request for Proposals (RFP)	September 17, 2007 to March 10, 2008	Two of the three proponents submitted proposals (Infusion Health withdrew from the competition as one of their key team members was not in a position to continue and could not be replaced).
Selection of Preferred Proponent	May 23, 2008	After evaluation of the proposals, BC Healthcare Solutions was selected as the preferred proponent.
Project Agreement Finalization	Financial close achieved August 28, 2008 following negotiations between the project team and BC Healthcare Solutions. A Project Agreement was signed by Fraser Health and BC Healthcare Solutions.	A Project Agreement was signed by Fraser Health and BC Healthcare Solutions.
Project Development to Completion	August 28, 2008 to April 2011	Detailed design and construction commences on the SOH project, with delivery expected as indicated.

## RFP Process and Evaluation of Proposals

Fraser Health appointed an Evaluation Committee, with the assistance of topic-specific Evaluation Teams, that evaluated proposals using the evaluation criteria and the evaluation procedure as set out in the RFP. The Evaluation Teams consisted of individuals with specific expertise who were selected based on their ability to assist the Evaluation Committee with the evaluation.

There were four broad categories of evaluation criteria:

- Design and Construction;
- Technical;

- Commercial and Financial; and
- Facilities Management.

Evaluation Teams were assisted by individual technical experts who were appointed by the Evaluation Committee to provide critical technical advice. These technical experts specialize in a variety of industry specific areas, including: architecture, structural, civil, mechanical, electrical and geotechnical.

Following a rigorous evaluation process, the Evaluation Committee issued a report recommending BC Healthcare Solutions as the preferred proponent. This recommendation was approved by Fraser Health's Board of Directors.

## Fairness Advisor

A Fairness Advisor, John Singleton Q.C., monitored all evaluation activities and completed a fairness report that was presented to Fraser Health's Board of Directors prior to final ratification.

In the report, the Fairness Advisor noted that, ***"All the members of the Evaluation Team were very alert to their responsibility to make the process robust, fair and transparent and in my view they not only met but exceeded the obligation placed on them to achieve those ends."***

## Project Agreement Finalization and Financial Close

Among the significant accomplishments of the SOH project is how expeditiously the Project Agreement was completed, taking just over seventeen months from the RFQ issue date on March 21, 2007 to Financial Close on August 28, 2008.

## Competitive Selection Costs

The cost of the competitive selection process is factored into the value for money analysis. The total competitive selection cost for the SOH project from approval of the business case to Financial Close is

\$6.8 million, including partial compensation to the unsuccessful proponent (\$250,000). Other competitive selection expenses include the cost of developing output specifications, preparing procurement documentation, obtaining advice from external advisors and preparing a project report.

## Procurement Best Practices

As a centre of PPP procurement expertise, Partnerships BC continues to develop best practices. Partnerships BC continually transfers knowledge and experience gained from past projects to others, to improve efficiency and quality, and to streamline and expedite the procurement process to save time and money for the public sector. Partnerships BC is represented on the steering committees to provide PPP expertise and application of PPP best practices. For example, the use of certain procurement documents across health care projects, including the SOH project, has resulted in the reduction of certain procurement-related costs. Procurement expertise is shared with ongoing knowledge transfer between projects in various sectors.

## 4. The Final Project Agreement

### Final Project Agreement Cost

The project capital cost of the SOH, to be delivered using the partnership delivery model, is fixed at \$172.4 million.

### Profile of Private Sector Partner

BC Healthcare Solutions offers a blend of international PPP experience and local delivery capability. Bouygues Bâtiment International, HSBC Infrastructure Fund Management Ltd. and Ecovert FM, the consortium's sponsors, have worked closely together in the PPP market for 10 years and have been successful on 11 projects, the majority of which are in the health care sector. The consortium has completed construction of four hospitals abroad.

**Bouygues Bâtiment International** is a subsidiary of Bouygues Construction, one of the largest construction and services provider in the world. Bouygues Bâtiment International is a network of local subsidiaries, active in 20 countries, specialized in all types of complex projects: private and public housing, office developments, hotels, schools, airports, industrial plants and leisure facilities. Bouygues Bâtiment International is involved in all stages of the project from inception to operations and its expertise in design and construction is applied to all types of contracts, whether as general contractor, design and build contracts, concessions or public private partnerships.

**HSBC Infrastructure Fund Management Ltd.** is a long-term investor in infrastructure projects and has more than 10 years of investment experience in PPP projects and the infrastructure sector globally. Through the funds that it manages, HSBC has invested in more than 50 projects, including 20 health care facilities.

Senior debt will be provided by a lending group of banks – **Dexia Credit Local S.A.** is a European bank with more than 36,500 employees in 39 countries, including a branch in Canada where it has led various major infrastructure financings over the past three years. **DEPFA Bank** is a leading provider of

financial services to the public and infrastructure sectors and has participated in financing more than 200 infrastructure projects globally; and, **Bank of Ireland** is a diversified financial services group headquartered in Dublin, established in 1783 by Royal Charter and today has approximately 16,000 employees group-wide. It is the largest Irish bank by total assets and a highly rated Irish listed financial institution.

**Bird Design-Build Ltd.** opened its first operation in 1998 in Seattle, Washington. Today Bird Construction is a leading general contractor in the United States and Canada. Services include Design/Build, Construction Management, Pre-Construction Services and PPPs. Bird's Canadian head office is located in Toronto, Ontario and the company has an office in Richmond, B.C.

**Kasian Architects** is a global architecture and interior design firm with nearly 400 staff across eight offices in Canada, Asia and the Middle East. Kasian provides design solutions for education, recreational, public and health care facilities, transportation infrastructure, corporate offices, and hospitality and retail environments. The Western Canada office is located in Vancouver, B.C.

**Ecovert FM** is a subsidiary of ETDE, a member of the Bouygues Construction group that specializes in networks, mechanical and electrical engineering and FM services. Ecovert FM operates within the UK and in other overseas markets, primarily in the healthcare, education and central government sectors. With a team of 1,600 staff, Ecovert FM provides total facilities management services through direct service delivery to a range of public and private sector clients.

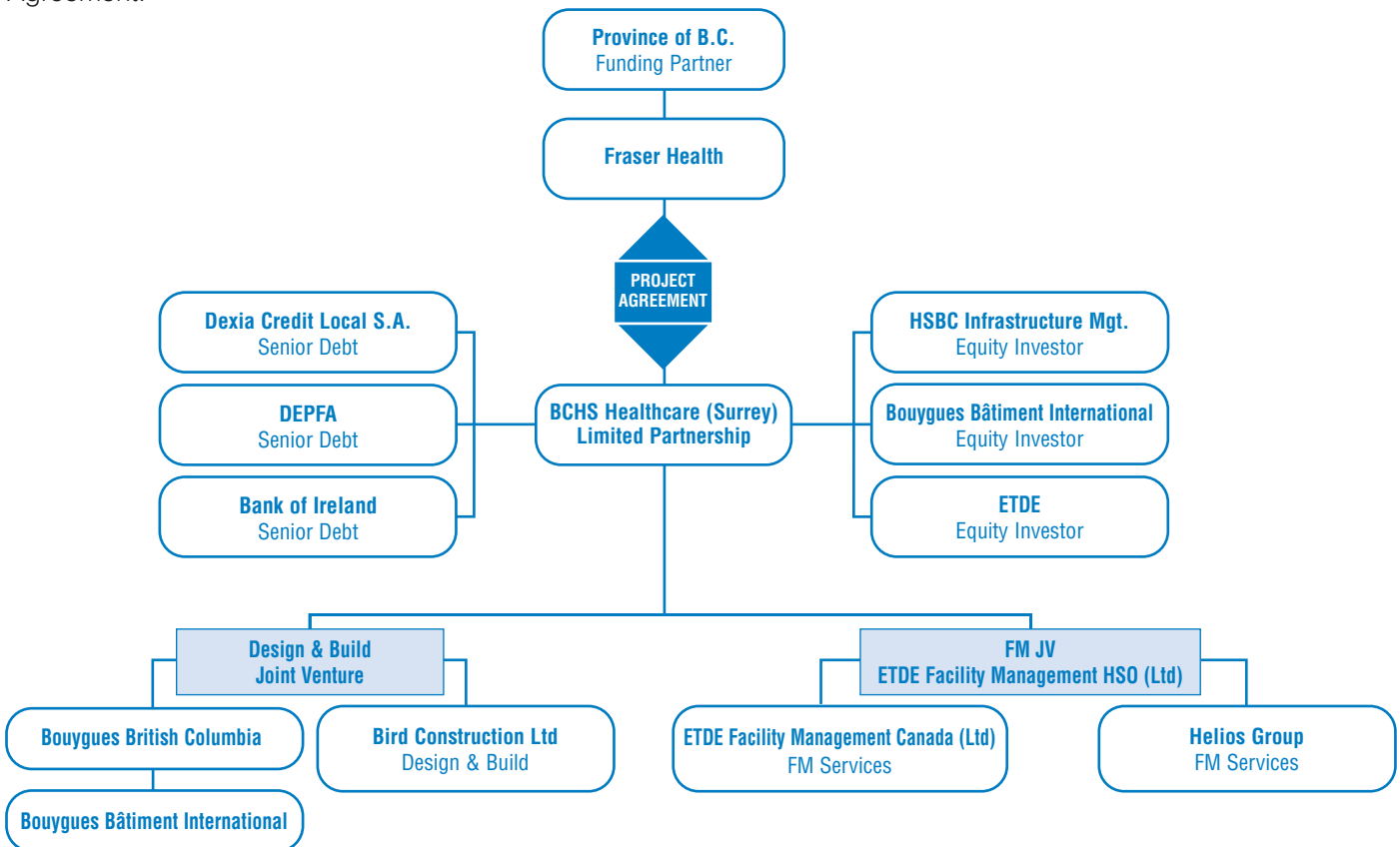
**Helios Group** has been offering management services for customers since 1981 in the municipal, institutional, commercial and industrial sectors. The Helios Group and its subsidiaries activities include water and wastewater treatment, energy production and facilities management fields. Their headquarters are located in Montreal, Quebec.

## Key Terms of the Project Agreement

### Agreement Structure

The private sector partner has incorporated a single purpose entity, BC Healthcare Solutions, to enter into the Project Agreement and undertake the project. BC Healthcare Solutions is responsible for the entire cost of the design, construction, operations and lifecycle maintenance of the SOH facility as defined in the Project Agreement. BC Healthcare Solutions has been granted an exclusive license to undertake the construction of the project, and then a non-exclusive license to provide the services as defined in the Project Agreement.

The organization chart below depicts the relationship between the signatories to the final Project Agreement.



### Design and Key Features

BC Healthcare Solutions is responsible for all aspects of the design, construction and commissioning of the new facility. Project deliverables for SOH include a new four-storey, 17,500 square-metre outpatient hospital with operating rooms, procedure rooms, clinics and public amenities. The design ensures a clear separation of patient, visitor and service flows while incorporating therapy and support services, convenient access and parking arrangements and excellent flexibility for the future.

### Refinancing:

In the event BC Healthcare Solutions refinances the initial senior debt amount (except in a limited number of specified circumstances, the purpose of which, in broad terms, is to ensure the continuance of the project rather than to receive a financial benefit), the resulting gain will be shared on a 50-50 basis between the public and private sectors. This also applies where equity is converted to senior debt on more favourable terms to those in place at financial close.

### **Construction Schedule**

BC Healthcare Solutions is responsible for completing and commissioning the new SOH by April 2011.

### **Ownership**

Fraser Health owns the site and the SOH.

### **Facilities Management Services,**

BC Healthcare Solutions is required to provide facilities management services for the new facility throughout the term of the Project Agreement.

BC Healthcare Solutions is responsible for delivering the following facilities management services:

- Plant services;
- Housekeeping and waste management services;
- Help desk services;
- Utility services;
- Grounds maintenance;
- Parking Management Services; and
- Retail Management.

### **Equipment**

BC Healthcare Solutions will be responsible for the procurement, installation and commissioning of medical equipment for the facility; Fraser Health will, however, finance the purchase of the equipment and retain responsibility for the choice of specific equipment. Fraser Health will be responsible for the maintenance and the renewal of major medical equipment, while BC Healthcare Solutions will be responsible for the maintenance of some fixed and medical support equipment. Additionally, BC Healthcare Solutions is responsible for the procurement, installation and maintenance of furniture in the facility.

### **Term of the Contract**

The Project Agreement term is 32.5 years. This includes a construction period and 30 years of operation from service commencement scheduled to be April 2011. The contractual expiry date remains fixed regardless of when service actually commences – that is, construction delays reduce the operating period while early delivery extends the operating period. At the end of the term, the facilities must be of the standards specified in the Project Agreement.

### **Performance-Based Payment Principles**

Once construction is complete and occupancy permits are in place, Fraser Health is responsible for paying BC Healthcare Solutions ASPs for 30 years. Fraser Health is responsible for making monthly payments to BC Healthcare Solutions based on performance, facility availability and service quality. BC Healthcare Solutions' performance will be continuously monitored throughout the operating period based on key performance indicators, and Fraser Health may make deductions from the monthly payments if the Project Agreement standards are not met.

Payment deductions are based on the severity of the failure, the importance of the areas affected and their degree of availability. For example, if an incident occurs that requires cleaning in a high risk functional area within a specified period (which could be 10 or 20 minutes depending on the level of urgency), and the clean-up is not performed as required, a deduction of \$3,000 could occur.

### **Adjustments to Payments**

ASPs may be adjusted to reflect specific circumstances as defined in the Project Agreement, including:

- **Indexation:** The capital component of the annual service payment will not be indexed. The facilities management services component of the ASP is indexed by Consumer Price Index (CPI) with periodic calibration to the market through benchmarking or market testing.



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- **Benchmarking and Market Testing:** Every six years the costs of certain services will be compared against the market cost of procuring those services. The method of this comparison may be a benchmarking exercise, or may involve a re-tendering of those services by BC Healthcare Solutions depending on the quality of the performance of those services in the preceding six years. Changes in the cost of those services following this process will be reflected in an amended ASP.
- **Variations:** If Fraser Health requires BC Healthcare Solutions to make a physical change or amend the services, Fraser Health can either make a lump sum payment, or have the cost of the change financed. If Fraser Health chooses to have the change financed, the cost will be reflected in an amended ASP. The mechanism for developing and determining the cost of a variation is set out in the Project Agreement.
- **Change in Law:** If there is a discriminatory change in law, the ASP may be amended to leave BC Healthcare Solutions in no better or worse position than if that change in law had not occurred.
- **Compensation Events:** If an event occurs that warrants compensation of BC Healthcare Solutions, the amount may be provided by adjustment to the ASP.
- **Insurance:** Insurance during the construction and operational period will be placed with the Province's Health Care Protection Program.

### Risk Allocation Summary

In projects that are procured using the traditional delivery model, the design, construction, operations and maintenance are rarely integrated and as a result, the public sector retains significant risk. One of the key advantages of the partnership delivery model is the sharing of the burden of risk. For example, the public sector is better able to determine whether the design of the hospital will meet the health authority's clinical functionality needs, and so retains that risk. Similarly, the private partner will be better able to ensure the design will be cost effective from an operational and

maintenance perspective of the facility's lifecycle, and so accepts that risk. Some risks are shared, such as a relief event like an earthquake or flood. For every shared risk the Project Agreement stipulates how the risk will be allocated, for example, by providing thresholds for each party's responsibility for a certain risk. In the event of any difference in interpretation of the risk allocation, the dispute resolution mechanism would apply.

The following table provides an overview of risk allocation for the project:

RISKS RELATING TO:	PUBLIC (FRASER HEALTH)	PRIVATE (BC HEALTHCARE SOLUTIONS)
Design and Construction		✓
Financing		✓
Schedule		✓
Maintenance		✓
Commissioning		✓
Lifecycle capital		✓
Geotechnical		✓
Systems and civil works integration		✓
Utility volume		✓
LEED Gold certification		✓
Ownership	✓	
Program delivery/ decision-making	✓	
Legislative change	✓	
Undisclosed environmental liability	✓	
Demand for facility	✓	
Clinical functionality	✓	
Force Majeure	✓	✓
Relief event (e.g. fire)	✓	✓
Excusing event (e.g. police shut down facility)	✓	✓



This risk allocation is supported by the following provisions in the Project Agreement:

- Fraser Health begins making performance-based payments to BC Healthcare Solutions only when an independent certifier confirms that the conditions for service commencement have been achieved;
- The expiry date of the Project Agreement is fixed, so any delays in completing construction will reduce payments to BC Healthcare Solutions, providing a strong incentive for timely completion; and
- Provisions are in place for payment reductions if BC Healthcare Solutions does not meet agreed upon standards for facility operation and maintenance.

### Financial Summary

The operating cost of the SOH in the first year is expected to be \$119.4 million; approximately 84 per cent is the cost of clinical health care and related support services provided by Fraser Health; the remaining 16 per cent represents the annual service payment to BC Healthcare Solutions. This is illustrated in the chart (top right).

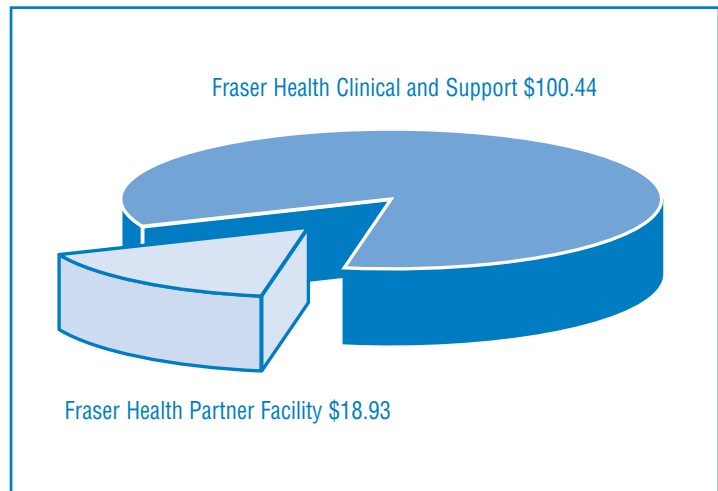
The graph (bottom right) demonstrates the anticipated ASP stream to BC Healthcare Solutions over the term of the Project Agreement. The graph is expressed in nominal dollars, which assumes 2.5 per cent inflation for facility management services. Payment projections assume no penalties and no deductions.

### Accounting Treatment

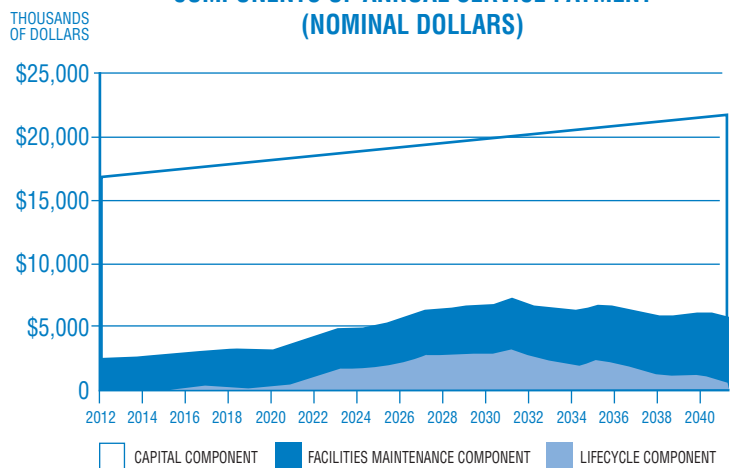
When the provincial government began entering into PPP agreements, there was little in the way of guidance on appropriate Canadian accounting treatment for PPPs. The cost of the total contract was known; however, for accounting and reporting purposes, it was unclear as to how much of the total project cost should be allocated to capital cost and how much toward operating expense.

Previously, reporting on the capital cost of PPPs focused on construction costs as the means of allocating the contract amount between capital costs and operating expenses. The Office of the Comptroller General, responsible for the overall quality and integrity of the government's financial management and control systems, has established accounting guidelines for PPP projects which clarify that the costs allocated to capital must also include items such as interest during construction and project management costs. The total project value of \$239.1 million reflects this accounting treatment.

**PROJECTED COST OF FIRST FULL YEAR - \$M**



**COMPONENTS OF ANNUAL SERVICE PAYMENT (NOMINAL DOLLARS)**



## 5. Ongoing Project Agreement Monitoring

The Project Agreement with BC Healthcare Solutions includes checks and public interest safeguards to ensure project delivery, performance and high quality standards. Monitoring spans every phase of the project, from Financial Close through design and construction, and operations and maintenance over the term of the agreement. There are a number of major phases in the project-monitoring schedule, with roles and responsibilities assigned to project participants at each stage.

### **Self Monitoring by the Partner**

The Project Agreement is designed to motivate the partner to ensure delivery, performance and high standards of quality given the monetary consequences of not achieving these requirements.

### **Design and Construction Phases**

The Project Agreement stipulates that Fraser Health will designate a design representative and a Construction Representative. These representatives have authority to act on behalf of Fraser Health during the design and construction phases of the project, and to review, approve, accept or confirm BC Healthcare Solutions activities, in accordance with the Project Agreement. Fraser Health representatives will have full access to the construction site, drawings and specifications, and report their observations to Fraser Health. In addition, an Independent Certifier monitors and reports upon construction progress and will provide certification that the conditions for service commencement have been achieved.

### **Operations and Maintenance Phase**

The Project Agreement stipulates that Fraser Health must assign a representative to serve as a member of the Operating Period Joint Committee over the 30-year term of the partnership. The committee is a formal forum where parties consult and cooperate on all matters related to the facility during the operational term.

### **Long Term Project Agreement Review**

Partnerships BC will work with Fraser Health and the Ministry of Health Services to design a process for reviewing the Project Agreement at appropriate intervals such as five, 10 and 15 years from the start of operations. The review process will enable the Province to establish whether the Project Agreement is functioning as intended, and whether the expected benefits have been realized.

### **Role of Project Team**

Fraser Health has established a Project Team responsible for leading project oversight and monitoring efforts. An experienced Project Officer, along with experts in design and construction, clinical services, facilities management services, and technical requirements, will work in the Project Office. The Project Team is responsible for reporting to an executive steering committee on all aspects of the SOH project.

## 6. Project Benefits and Innovations

The design and construction specification for the SOH was informed by evidence-based literature and research that was undertaken as part of the Surrey Health Services Capacity Initiative. The design provided by BC Healthcare Solutions offers many benefits and innovations for Fraser Health. It is expected that the resulting facility will support Fraser Health by realising their six core principles established as objectives for the facility. The core principles, and corresponding benefits of BC Healthcare Solutions' design, are outlined below.

### A Patient-Centred Outpatient Hospital

Concepts for the outpatient hospital have always included the provision of high-quality, culturally-sensitive, elder-friendly design, and decisions taken along the way have reflected these principles.

Some of the highlighted patient-focused features of the SOH are:

- The facility will have a non-institutional feel, moving away from the traditional hospital feeling to a more patient-centred, modern, express service concept;
- The facility will support superior patient flows through the facility, with logical and intuitive way-finding and shorter travel times for patients and their families;
- The facility will offer significant patient amenities including well thought out atrium space, pharmacy, retail food outlets and accessible attractive outdoor space;
- The design will optimize views and natural light;
- The facility will include a non-denominational quiet space; and
- The facility will support convenient access including well designed roads and circulation, provision for public bus access, taxi spaces and drop off bays, Fraser Health shuttle bus access and significant parking capacity (600 spaces, including both surface and underground parking).

### A Forward-thinking (Future-oriented) Outpatient Hospital

During the planning and procurement of the facility, significant emphasis was placed upon future flexibility, realising the fast-changing nature of health care, as well as Surrey's increasing population. The design for the facility is very flexible in terms of models of care, technology and potential for future growth. Some highlighted features are:

#### *Future Care Delivery Trends*

- As well as excellent patient flows, the facility offers superior work flow for staff and supplies;
- Consideration for infection control issues;
- Most departments exceed the size suggested in the functional program, offering greater flexibility for programs for the future; and
- The design meets the key design principles set out in the design and construction specifications.

#### *Technologies*

- Modular/removable walls will allow easy replacement of medical equipment such as MRI;
- Wireless IT capabilities will allow the facility to adopt electronic health advances as they arise; and
- Mechanical systems are designed to accommodate future expansion.

### Efficient Use of Resources

Planning for the facility recognized the need to maximize the value of each health care dollar spent, both during the development of the facility and during its operational use. In addition, the need for efficient use of human resources is imperative, recognizing increasing pressures on the availability of sufficient clinicians and allied support workers. The facility design supports efficient staff and supply flows and patient intake systems, and will be designed to achieve LEED Gold certification and meet energy efficiency requirements. These features all speak to the opportunity for more efficient use of resources in this new facility.

## **Integrated Care Delivery and Knowledge Transfer**

The facility is designed to enable the involvement of all appropriate care providers in the diagnosis and treatment of patients and facilitate access by care providers to complete and timely health information. BC Healthcare Solutions carefully considered clinical adjacencies and patient/staff workflows, as well as the provision of information technology to facilitate integrated care delivery. In addition, the atrium/public space includes education space.

## **Optimized Health Outcomes (Better Health)**

The facility should facilitate excellence in clinical and support services and a healthy workplace environment. The BC Healthcare Solutions design supports these goals.

The outpatient hospital will be built on a greenfield site, in an urban forest. Efforts have been made to design the hospital in such a way that it will preserve trees, foster views of green spaces, and provide a welcoming environment around the hospital for patients and staff. Some of the highlighted environmental features of the SOH are:

- The building will maximize the use of sustainable building products and furnishings, and be energy efficient; and
- There will be public access to green space that surrounds the facility.

## **An Outpatient Hospital that Strives for Excellence (Best in Healthcare)**

The facility design will allow for excellence in clinical and support services delivery and a healthy workplace environment. As well, the facility has an innovative and forward-thinking design that allows for future expansion. The BC Healthcare Solutions design supports these goals.

## **Facilities Management Services**

Facilities management services are a further key feature of the SOH project, meaning the private partner is responsible for managing physical plant maintenance for the whole site, including housekeeping, and waste management, retail management services and parking services. BC Healthcare Solutions will provide a helpdesk that will coordinate and respond to the needs of the facility's users. Physical plant maintenance is a critical component of the partnership because it ensures the private partner is accountable for the provision of physical plant maintenance and related services for the facility, and for constructing and maintaining the facility in accordance with the Project Agreement.

## 7. Achieving Value for Money

Value for money is a broad term that captures both quantitative factors such as costs, and qualitative factors such as service quality. Partnerships BC looks at a broad range of factors in determining whether a project offers value for money to taxpayers, including comparison of the final agreement to other benchmarks – for this project, the expected results of a hypothetical traditional delivery model, and the expected results of the actual partnership delivery model.

Financial value for money is the difference between the net present cost of the ASPs that will be paid to BC Healthcare Solutions over the life of the Project Agreement and the expected net present cost of the capital cost, facility management and operating costs, lifecycle maintenance costs and transferable risk costs included in the reference project.

Based on the above, it was determined that the net present cost of the SOH project delivered traditionally is an estimated \$256.7 million. The final Project Agreement with the private partner, BC Healthcare Solutions, has a net present cost of \$234.2 million. ***In financial terms, the final agreement is expected to achieve value for taxpayers' dollars of \$22.5 million.***

The significant factors in creating this value for money include efficiencies from competitive construction pricing, integrating the design, build and finance teams and efficient transfer of risk.

The net present cost figures above were developed using a discount rate, which represents the costs of capital over time taking into account factors such as inflation and interest rates. The discount rate used for the calculation of value for money is 7.5 per cent. Sensitivity analysis of the discount rate showed that the net present cost of the Project Agreement would have been approximately \$16.2 million less than that of the public sector comparator if the discount rate was 50 basis points lower, and about \$28.3 million less if the discount rate was 50 basis points higher.

Below is a table that describes the net present cost comparison. All numbers are in millions of dollars.

	Final Agreement	PSC
Development Period Costs, Including Retained Risks		\$149.2
Operating Period Costs including retained Risk	-	\$52.5
Public Sector Procurement Costs	\$9.3	\$4.7
Tax and Insurance Adjustment	-	\$3.3
Land Acquisition and Site Development Cost	\$1.3	\$1.3
IM and Equipment Costs	\$47.5	\$45.7
ASP Payment to BC Healthcare Solutions	\$174.7	
Retained Risk During Development Period	\$0.4	
Irrecoverable GST	\$1.0	
<b>Total</b>	<b>\$234.2</b>	<b>\$256.7</b>
Cost Differential	\$22.5	
Percentage savings from PSC	8.8 per cent	

## Qualitative Benefits

As a result of the robust and competitive process to select a private partner to deliver the SOH project, there are a number of additional qualitative benefits that contribute to achieving value for money. These additional benefits are summarized below:

- The facility has an innovative forward-thinking design that allows for future expansion:
  - o Duct/pipe riser shafts are located on the exterior of the facility providing significant greater flexibility, adaptability and future expandability for the facility, a significant innovation over traditional health facility designs;
  - o The design includes an excellent concept for expanding the facility across the site, in any future phases, minimizing disruption to the existing facility during expansion; and
  - o Mechanical systems are designed to accommodate future expansion. Source equipment (heat pumps, boilers) are ready to accommodate future addition with minimal disruption. The penthouse mechanical room and external shafts have been designed taking into account a 30 per cent expansion plan.
- The outpatient hospital will be built on a greenfield site, in an urban forest. Efforts have been made to design the hospital in such a way that it will preserve trees, maximize views of green spaces, and provide a welcoming environment around the hospital for patients and staff. Some of the highlighted environmental features of the SOH are:
  - o The facility will maximize the use of sustainable building products and furnishings, and be energy efficient;
  - o An easy-to-navigate floor plan, providing ease of access and staff/patient movement;
  - o Dedicated green space, generous use of natural light throughout, and access to gardens and views; and
  - o A non-denominational quiet space.

## Additional Qualitative Benefits

- Competition and innovation: the competitive nature of the bidding process encourages the private partner teams to develop innovative solutions in all aspects of the project from design, construction and through to operations;
- Schedule and cost certainty: the private partner is only paid once the facility is available for use, thereby providing a financial incentive to complete the project on time and on budget;
- Integration: because the private partner is responsible and accountable for the design and construction, long-term maintenance and rehabilitation of the facility, there are opportunities and incentives to integrate these functions in order to optimize performance of the facility over the duration of the Project Agreement; and
- Lifecycle maintenance: the private partner is responsible and accountable for ensuring the facility is maintained and rehabilitated over the duration of the Project Agreement, with financial penalties for non-compliance.



*Surrey Outpatient Hospital*

## Appendix – Changes in the Project

The SOH project team was able to identify and incorporate several improvements to the project during the planning, design and implementation phases following approval of the original business case in 2007. There are a number of factors that have resulted in additional benefits for Surrey residents and taxpayers, while ensuring the project remained cost-effective and represents value for money for taxpayers. Changes include:

- Project schedule: The construction schedule for the facility is six months longer than estimated due to the complexity of the building;
  - Procurement schedule: The release of the RFP was delayed by approximately three months and the procurement period was extended by six weeks;
  - Market and project pressures resulting in increased project cost:
    - o Rising cost of construction materials;
    - o Increasingly tight labour market; and
    - o Increased size and capacity of facilities necessary to accommodate growing needs.
  - LEED Gold Certification: A new provincial policy was introduced in September 2007 requiring all capital projects built to achieve LEED Gold certification.
- Facilities changes:
    - o Detailed planning processes recognized that additional clinical space would be needed to deliver the services as envisaged. As a result, the facility is 30 per cent bigger than foreseen in fall 2005;
    - o Additional parking was included in the project (including underground parking to protect the flexibility for future expansion on the site); and
    - o Information Management/Information Technology: IM/IT specifications for the facility were significantly expanded to keep pace with growing technological need and opportunity.

The project was originally announced in spring 2007 with a total project cost of \$151 million. As a result of the changes described above, the final total project cost has increased by \$88.1 million.

